TEST REPORT

Applicant	:	Changsha Hongdun Trading Co., Ltd.
Address	:	Room 910, 911, 923, Building 1, Plot 5, Oakes Pioneering Plaza, No. 858, Dujuan Road, Wangyue Street, Yuelu District, Changsha City, Hunan Province - No. 563
Manufacturer	:	JinKaiYue (DongGuan) Technology Co., Ltd.
Address	:	602 Room, 4 Building, No.9 Yuhu Road, Fenggang Town, Dongguan, Guangdong, China
Product Name	:	Wireless Carplay adapter
Model Number	:	KY-4186, KY-4188S, KY-4190S, KY-4193S, KY-4222S, KY-4224S, KY-4235S, KY-4251S, KY-4101S, KY-4129S
Trademark	:	N/A
Date of Receipt	:	Jul. 13, 2026
Test Date	:	Jul. 13, 2026 to Jul. 29, 2026
Date of Report	:	Jul. 29, 2026
Test Result	:	This device described above has been tested by BKC, and the test results show that the equipment under test (EUT) is in compliance with the Article 2 Paragraph 1 of Item 19 requirements. And it is applicable only to the tested sample identified in the report.

Test Procedure Used:

Standards	:	Article 2 Paragraph 1 of Item 19 MIC Notice No.88 Appendix No.43

Prepared by(Test Engineer):
Sten Huang

Sten Huang

Approved(Manager):
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Casey Wang

Approved(Manager):
Jerry Liao

SHENZHEN BKC TESTING CO., LTD. BKC APPROVED

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Revision History of This Test Report		
Report Number	Description	Issued Date
BKC26074134GE-1	Initial Issue	2026-07-29

1. General Information

1.1. Description of Device (EUT)

EUT Name	:	Wireless Carplay adapter
Model No.	:	KY-4186, KY-4188S, KY-4190S, KY-4193S, KY-4222S, KY-4224S, KY-4235S, KY-4251S, KY-4101S, KY-4129S
Model Difference	:	The product is different for model name .The mains test model is KY-4186
Power supply	:	Input: 5V⎓ 0.5A
Operation frequency	:	2.402-2.480GHz
Max. RF output power:	:	1mW/MHz
Modulation	:	GFSK, Pi/4 DQPSK, 8DPSK
Antenna Type	:	PCB Antenna, Maximum Gain is 4.29dBi
Intend use environment	:	Residential, commercial and light industrial environment
Adapter Information	:	N/A
Software version	:	V1.0
Hardware version	:	V1.0

1.2. Channel List

BT mode

Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)
0	2402	1	2403	2	2404	3	2405
4	2406	5	2407	6	2408	7	2409
8	2410	9	2411	10	2412	11	2413
12	2414	13	2415	14	2416	15	2417
16	2418	17	2419	18	2420	19	2421
20	2422	21	2423	22	2424	23	2425
24	2426	25	2427	26	2428	27	2429
28	2430	29	2431	30	2432	31	2433
32	2434	33	2435	34	2436	35	2437
36	2438	37	2439	38	2440	39	2441
40	2442	41	2443	42	2444	43	2445
44	2446	45	2447	46	2448	47	2449
48	2450	49	2451	50	2452	51	2453
52	2454	53	2455	54	2456	55	2457
56	2458	57	2459	58	2460	59	2461
60	2462	61	2463	62	2464	63	2465
64	2466	65	2467	66	2468	67	2469
68	2470	69	2471	70	2472	71	2473
72	2474	73	2475	74	2476	75	2477
76	2478	77	2479	78	2480	-	-

1.3. Summary of test result

RF PART		
Test Items	**Test Requirement**	**Result**
Antenna Power and Antenna Power Tolerance	Article 2 Paragraph 1 of Item 19	PASS
Frequency Tolerance	Article 2 Paragraph 1 of Item 19	PASS
Transmission Rate	Article 2 Paragraph 1 of Item 19	PASS
Occupied Frequency Bandwidth	Article 2 Paragraph 1 of Item 19	PASS
Spread Bandwidth	Article 2 Paragraph 1 of Item 19	PASS
Process Gain	Article 2 Paragraph 1 of Item 19	PASS
Number of Carriers	Article 2 Paragraph 1 of Item 19	N/A
Dwell Time	Article 2 Paragraph 1 of Item 19	PASS
Spurious emission intensity	Article 2 Paragraph 1 of Item 19	PASS
Half-power beam width	Article 2 Paragraph 1 of Item 19	Note1
Secondary Radiated Emissions	Article 2 Paragraph 1 of Item 19	PASS
Interference prevention function	Article 2 Paragraph 1 of Item 19	PASS
Remark: N/A is an abbreviation for Not Applicable. Note1 means the Max EIRP Power(-13.95 dBm/MHz) is less than 6.91dBm/MHz, , the test is not applicable.		

1.4. Test mode

The special RF test software was used to control EUT work in Continuous Bluetooth TX mode, and select test channel, wireless mode.

Test mode	Low channel	Middle channel	High channel
GFSK TX	2402MHz	2441MHz	2480MHz
GFSK RX	2402MHz	2441MHz	2480MHz
Pi/4DQPSK TX	2402MHz	2441MHz	2480MHz
Pi/4DQPSK RX	2402MHz	2441MHz	2480MHz
8DPSK TX	2402MHz	2441MHz	2480MHz
8DPSK RX	2402MHz	2441MHz	2480MHz

Test mode	channel	/	/
GFSK TX	Hopping	/	/
Pi/4DQPSK TX	Hopping	/	/
8DPSK TX	Hopping	/	
Note：Only the worst Data DH5/2DH5/3DH5 Record in the report			

1.5. Test Conditions

Supply Voltage			
	Input Voltage (Vac)	Voltage at the input of the RF Circuit (Vdc)	Tolerance (%)
Normal	5	3.3	
+10%	5.5	3.3	0
-10%	4.5	3.3	0
Others			
Temperature (° C)	22.5		
Relative humidity	51%.		
ATM Pressure:	1019 mbar		
Note 1: When the input voltage is reduced or increased by 10%, the regulator voltage changes of less than 1%.So the following test items are conducted in the normal voltage.			

1.6. Measurement Uncertainty (95% confidence levels, k=2)

Item	MU	Remark
Uncertainty for radio frequency	$\pm 7\times10^{-8}$	
Uncertainty for conducted RF Power	±0.20dB	
Uncertainty for temperature	0.6℃	
Uncertainty for humidity	1%	

1.7. Special Accessories and Auxiliary Equipment

Description	Manufacturer	Model No.	Hardware Version	Software Version
PC	HP	RYBD-14i01	/	/

1.8. Test Facility

Site Description		
Name of Firm	:	Shenzhen BKC Testing Co., Ltd.
Site Location	:	Room103, 1/F, Huaya Building, Huaya Industrial Park, Yousong Community, Longhua Subdistrict, Longhua District, Shenzhen, Guangdong, China

1.9. Test Equipment

Radiated Test Site(Below 1G and Above 1G)

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until
1	Antenna	Schwarzbeck	VULB 9168	01321	Mar. 20. 2025	Mar. 19. 2027
2	EMI Test Receiver	R&S	ESRP	101478	Mar. 11. 2026	Mar. 10. 2027
3	Preamplifier	HP	8447D	2727A05345	Mar. 11. 2026	Mar. 10. 2027
4	Double Ridged Broadband	SCHWARZBECK	BBHA 9120D	02621	Mar. 11. 2026	Mar. 19. 2028
5	Preamplifier	Schwarzbeck	BBV 9718D	00041	Mar. 11. 2026	Mar. 10. 2027
6	Rf cables	HUBER+SUHNER	8M-RE	N/A	Mar. 11. 2026	Mar. 10. 2027
7	Rf cables	HUBER+SUHNER	1.5M-RE	N/A	Mar. 11. 2026	Mar. 10. 2027
8	Rf cables	HUBER+SUHNER	1.5M-AP-RE	N/A	Mar. 11. 2026	Mar. 10. 2027
9	Loop antenna	ANRF	ANRF-6603	091802	Mar. 16. 2026	Mar. 15. 2027
10	Spectrum analyzer	R&S	FSP40	200061	Mar. 11. 2026	Mar. 10. 2027
11	Double Ridged Broadband Horn Antenna	COM-POWER	AH-1840	10100009	Mar. 11. 2026	Mar. 10. 2027
12	Spectrum	Agilent	N9020A	MY50510311	Mar. 11. 2026	Mar. 10. 2027
13	Band Stop Filter	Bafang	BSF5G	2024052610	Mar. 11. 2026	Mar. 10. 2027
14	RE Testing software	EZ	EZ-EMC	/	/	/

RF Test Site

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibration Date	Calibrated until
1	Spectrum	Agilent	N9020A	MY50510311	Mar. 11. 2026	Mar. 10. 2027
2	Vector source	Agilent	N5182A	MY47420223	Mar. 11. 2026	Mar. 10. 2027
3	All instrument	Rohde & Schwarz	CMW 500	101131	Mar. 11. 2026	Mar. 10. 2027
4	control unit	MW	MW100-RFCB	MW200411BK-34	/	Mar. 10. 2027
5	RF Testing software	MW	MTS 8310	/	/	/
6	Spectrum analyzer	R&S	FSP40	200061	Mar. 11. 2026	Mar. 10. 2027

Note:The attenuator and power meter are already included in the control unit.
Antenna calibration:Shenzhen Academy of Metrology& Quality Inspection;
Other:HUAJUE MEDICAL TESTING AND METROLOGY (SHENZHEN) CO.LTD.;
Remark:
Calibration conducted in countnes except Japan, which shall be equivalent to the calibration conducted by the NICT or a desianated calibration agency under Article 102-18 paragraph (1).

Test software

Software name	RF Testing software
Software version	2.0.0.0
Software name	RE EMI Testing software
Software version	EMEC-03A2 RE+

Remark:

(a) Calibration conducted by the National Institute of Information and Communications Technology (NICT) in Japan (hereinafter referred to as "NICT") or a designated calibration agency under Article 102-18 paragraph (1) in JRL.

(b) Correction conducted pursuant to the provisions of Article 135 or Article 144 of the Measurement Act (Act No. 51 of 1992) .

(c) Calibration conducted in countries except Japan, which shall be equivalent to the calibration conducted by the NICT or a designated calibration agency under Article 102-18 paragraph (1).

(d) Calibration, etc. conducted by using measuring instruments and other equipment listed in the right column of appended table No. 3, which shall have been given any type of calibration, etc. listed above from (a) to（C）From JRL Article 24-2, paragraph 4, Item 2
(e) All calibration information is from Huajue Medical Testing and Metrology (Shenzhen) Co.,Ltd.

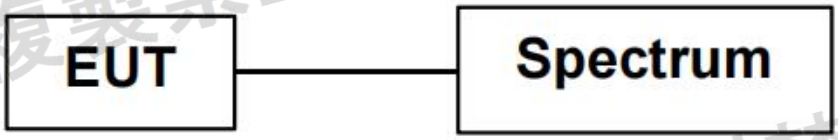
2. Frequency Tolerance

2.1. Limit

According to Radio Law of Japan item 19 of Article 2 Paragraph 1, Clause 3.2 (4), the Tolerance of frequency: ±50x10-6.

Limit
50ppm

2.2. Test Setup



2.3. Test Procedure

1.In the case of unmodulated signal (continuous or continuous burst), measure the frequency directly by a Spectrum.
2. Set RBW = 10 kHz.
3. Set the video bandwidth (VBW) = RBW.
4.SPAN=2MHz
5. Detector = Peak.
6. Trace mode = max hold.
7. Sweep = auto couple.

2.4. Test Result

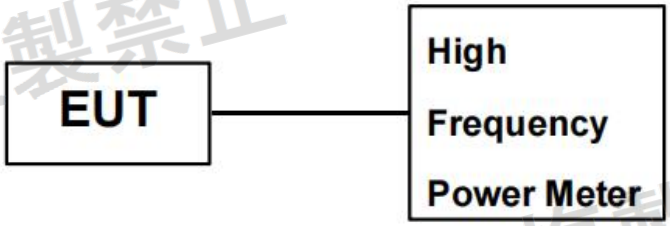
Please see the attachment for data.

3. Antenna Power Error Measurement

3.1. Limit

Item	Limits
Antenna Power Density	≦3mW/MHz
EIRP Power Density	≦6.91dBm/MHz
Antenna Power Error	+20% No lower limit

3.2. Test Setup



3.3. Test Procedure

For FHSS UUT

Measure the total power by the Power Meter in a state of hopping mode.

Calculate the mean power per 1MHz by dividing the reading level by spread bandwidth.

Output power Density (mW/MHz) = Total power (mW) / spread bandwidth(MHz)

3.4. Test Result

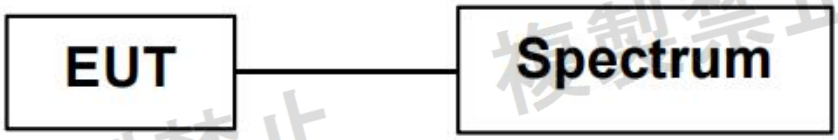
Please see the attachment for data.

4. Occupied Frequency Bandwidth(99% and 90%)

4.1. Limit

Item	Limits
Occupied Band Width(99%):	≦83.5MHz
Spreading Bandwidth(90%):	≧500 kHz

4.2. Test Setup



4.3. Test Procedure

1. Setting of SA is following as: RB: 1MHz / VB:1MHz / SPAN: 120MHz / AT: 10dB Ref: dBm / Sweep time: Auto / Sweep Mode: Continuous sweep / Detect mode: Positive peak / Trace mode: Max hold

2 . EUT have transmitted the maximum modulation signal and fixed channelize (For DSSS or OFDM Device) or continuous maximum power of hopping mode(For FHSS Device). SA set to 99% of occupied bandwidth to measure occupied bandwidth. The limit is less than 26MHz(For DSSS or OFDM Device) or 83.5MHz(For FHSS Device).

4.4. Test Result

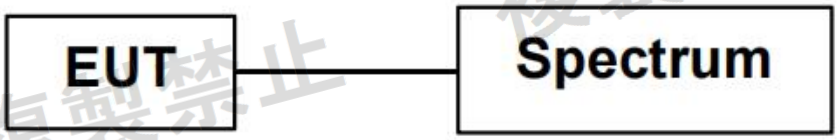
Please see the attachment for data.

5. Unwanted Emission Intensity Measurement

5.1. Limit

Item	Limit
TX Spurious Emission	30MHz - 2387MHz; 2.5μW/MHz or less 2387MHz – 2400MHz; 25μW/MHz or less 2483.5MHz – 2496.5MHz; 25μW/MHz or less 2496.5MHz – 12.5GHz; 2.5μW/MHz or less

5.2. Test setup



5.3. Test Procedure

1. EUT have transmitted the maximum modulation signal and fixed channelize.
2. Setting of SA is following as: Below 1GHz RB:1MHz / VB:1MHz
Above 1GHz RB:1MHz / VB:1MHz / AT: 10dB Ref: 0dBm / Sweep time: Auto
Sweep Mode: Continuous sweep / Detect mode: Positive peak
Trace mode: Max hold
3. Setting of SA is following as 30MHz and stop frequency 1000MHz Then to mark peak reading value + cable loss shall be less than 2.5μW/MHz.
4. Setting of SA is following as 1000MHz and stop frequency 2387MHz Then to mark peak reading value + cable loss shall be less than 2.5μW/MHz.
5. SA adjusted to start frequency 2387MHz and stop frequency 2400MHz. Then to mark peak reading value + cable loss shall be less than 25μW/MHz.
6. SA adjusted to start frequency 2483.5MHz and stop frequency 2496.5MHz Then to mark peak reading value + cable loss shall be less than 25μW/MHz
7. SA adjusted to start frequency 2496.5MHz and stop frequency 12500MHz Then to mark peak reading value + cable loss shall be less than 2.5μW/MHz

5.4. Test Result

Please see the attachment for data.

6. Dwell Time

6.1. Limit

Item	Limits
Hopping Freq. Dwell Time	≦ 0.4 sec (In 0.4 sec × spreading rate)

6.2. Test Setup

6.3. Test Procedure

a. The transmitter output (antenna port) was connected to the spectrum analyzer
b. Set RBW of spectrum analyzer to 1MHz and VBW to 1MHz.
c. Use a video trigger with the trigger level set to enable triggering only on full pulses.
d. Sweep Time is more than once pulse time.
e. Set the center frequency on any frequency would be measure and set the frequency span to zero span.
f. Measure the maximum time duration of one single pulse.
g. Set the EUT for DH1/DH3/DH5, 2DH1/2DH3/2DH5 and 3DH1/3DH3/3DH5 packet transmitting.
h. Measure the maximum time duration of one single pulse.
i. Dwell time = Pulse width(msec)*Number of Pulses

6.4. Test Result

Dwell Time = (One Pulse Time * (Burst Count in the specified period time);

Please see the attachment for data.

7. Secondary Radiated Emissions

7.1. Limit

Item	Limit
RX Spurious Emission	≤ 4 nW (Below 1GHz)
	≤ 20 nW (Above 1GHz)

7.2. Test Setup

7.3. Test Procedure

1. EUT have the continuous reception mode and fixed only one channelize.
2. Setting of SA is following as RB / VB: 100 kHz (below 1GHz emissions) / 1 MHz (above 1GHz emissions) /
AT: 10dB / Ref: 0dBm / Sweep time: Auto / Sweep Mode: Continuous sweep / Detect mode: Positive peak / Trace mode: Max hold
3. SA set RB: 100kHz and VB: 100kHz. Then adjust to start frequency 30MHz and stop frequency 1000MHz. Search to mark peak reading value + cable loss shall be less than 4nW
4. SA set RB: 1MHz and VB: 1MHz. Then adjust to start frequency 1000MHz and stop frequency 12500MHz. Search to mark peak reading value + cable loss shall be less than 20nW
5. If power level of lower emissions are more than 1/10 of limit (.0.4nW for f < 1GHz, 2nW for f >= 1GHz), all those are to be indicated in the 2nd and 3rd lines. If others are 1/10 or less more of the limit, no necessary to be indicated.

7.4. Test Result

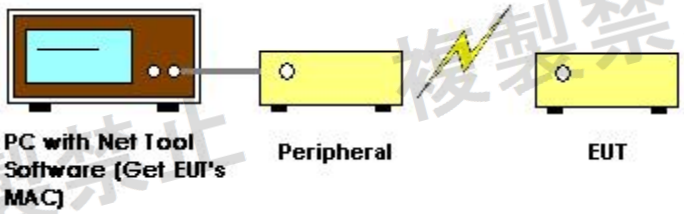
Please see the attachment for data.

8. Interference prevention function

8.1. Limit

Item	Limits
Identification code	≧48 bits

8.2. Test Setup



8.3. Test Procedure

1. In the case that the EUT has the function of automatically transmitting the identification code: a. Transmit the predetermined identification codes form EUT. b. Check the transmitted identification codes with the demodulator.
2. In the case of receiving the identification ocde: a. Transmit the predetermined identification codes form the counterpart. b . Check if communication is normal. c. Transmit the signals other than predetermined ID codes form the counterpart. d. check if the EUT stops the transmission, or if it displays that idnetification codes are different from the predetermined ones.

8.4. Test Result

The detected ID of the device is below:
18:FD:17:F3:12:P3
Test result: The device meet the requirements
PASS

9. Test Photographs

Reference to EUT photo attachment for details.

10. Appendix I: Photos of the EUT

Reference to EUT photo attachment for details.

※※※※※ **END OF REPORT** ※※※※※

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